



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent application

Inventor(s)

for

Title of invention

the specification of which is being transmitted herewith

OR

In re application of: PENN, Laurence Richard

Application No.: 10 / 642,496 Group No.: 3753

Filed: August 18, 2003

Examiner:

For: METERING DEVICE

Assistant Commissioner for Patents
Washington, D.C. 20231

SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENT

CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10*
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(Information Disclosure Statement [6-1]—page 1 of _____)



NOTE: "An information disclosure statement shall be considered by the Office if filed by the applicant:

- (1) Within three months of the filing date of a national application;
- (2) Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application; or
- (3) Before the mailing date of a first Office action on the merits, whichever event occurs last."

37 C.F.R. § 1.97(b).

NOTE: "Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section." 37 C.F.R. § 1.56(a).

"Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) each inventor named in the application;
- (2) each attorney or agent who prepares or prosecutes the application; and
- (3) every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application." 37 C.F.R. § 1.56(c).

NOTE: The "duty as described in § 1.56 will be met so long as the information in question was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98 before issuance of the patent." Notice of January 9, 1992, 1135 O.G. 13 -25 at 17.

WARNING: "No information disclosure statement may be filed in a provisional application." 37 C.F.R. § 1.51(b).

List of Sections Forming Part of This Information Disclosure Statement

The following sections are being submitted for this Information Disclosure Statement:

(check sections forming a part of this statement: discard unused sections
and number pages consecutively)

1. ☒ Preliminary Statements
2. ☒ FORMS PTO/SB/08A and 08B (formerly FORM PTO-1449)
3. ☐ Statement as to Information Not Found in Patents or Publications
4. ☐ Identification of Prior Application in Which Listed Information Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted
5. ☐ Cumulative Patents or Publications
6. ☒ Copies of Listed Information Items Accompanying This Statement
7. ☐ Concise Explanation of Non-English Language Listed Information Items
 - 7A. ☐ EPO Search Report
 - 7B. ☐ English Language Version of EPO Search Report
8. ☐ Translation(s) of Non-English Language Documents
9. ☒ Concise Explanation of English Language Listed Information Items (Optional)
10. ☒ Identification of Person(s) Making This Information Disclosure Statement

(complete the following, if appropriate)

Sections _____, respectively, have been continued on ADDED PAGE(S).

NOTE: "Once the minimum requirements are met, the examiner has an obligation to consider the information." Notice of April 20, 1992 (1138 O.G. 37-41, 37).



Section 1. Preliminary statements

Applicants submit herewith patents, publications or other information, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Section 6. Copies of Listed Information Items Accompanying This Statement

NOTE: 37 C.F.R. 1.98(a)(2) requires that any information disclosure statement filed under § 1.97 shall include: "A legible copy of: (i) Each U.S. and foreign patent; (ii) Each publication or that portion which caused it to be listed; and (iii) All other information or that portion which caused it to be listed, except that no copy of a U.S. patent application need be included . . . "

NOTE: The wording in § 1.98(a)(2)(iii) makes it clear that the requirement to submit a copy of each item of information listed in an information disclosure statement does not apply to the citation of a U.S. patent application. Notice of January 9, 1992, 1135 O.G. 13-25, at 14.

Legible copies of all items listed in Forms PTO/SB/08A and 08B (formerly Form PTO-1449) accompany this information statement.

(complete the following, if applicable)

- ☐ Exception(s) to above:
 - ☐ Items in prior application, from which an earlier filing date is claimed for this application, as identified in Section 4.
 - ☐ Cumulative patents or publications identified in Section 5.

Section 9. Concise Explanation of English Language Listed Information Items (OPTIONAL)

NOTE: *"Applicants may, if they wish, provide a concise explanation of why English-language information is being submitted and how it is understood to be relevant. Concise explanations are helpful to the Office, particularly where documents are lengthy and complex and applicant is aware of a section that is highly relevant to patentability or where a large number of documents are submitted and applicant is aware that one or more are highly relevant to patentability." Notice of April 20, 1992 (1138 O.G. 37-41, 38).*

British Patent No. 2,377,425, issued on January 15, 2003 to Penn, teaches a metering device that has a chamber with a shuttle therein, and a valve adapted to control the flow of fluid to an end of the chamber, causing the shuttle to move axially and displace fluid from the opposite end. Fluid is then subsequently supplied to the other side of the shuttle, causing it to move back to its initial position thus dispensing liquid from the other side. This patent was cited in the European Patent Office's search report on a corresponding application.

U.S. Patent No. 5,509,575, issued on April 23, 1996 to Gillette, describes a flow divider for substantially eliminating fluid intensification problems and pressure surges that includes a housing having an inlet, one or more outlets, and a cavity therebetween. A passageway defining spool is rotatably mounted in the housing cavity and includes passageways corresponding to the outlets that separately periodically connect the inlet to the outlets as the spool is rotated. "Floating" pistons are slideably mounted in the passageways as the spool is rotated. This patent was cited in the European Patent Office's search report on a corresponding application.

European Patent No. 0,194,370, issued on September 17, 1986 to Ranjith, discloses a metering dispenser device for supplying adjustable quantities of a product that comprises a double-acting piston whose stroke is adjusted by means of a stop. The position of the stop is adjustable by means of arrangement which ensures that as the adjustment takes place in either direction, no new surfaces are exposed to the interior of the cylinder, thereby obviating the need for re-sterilising or re-cleaning when the stroke is reset. A valve having similar feature is also disclosed. This patent was cited in the European Patent Office's search report on a

corresponding application.

Canadian Patent No. 1,067,462, issued December 4, 1979 to Demers et al., teaches an apparatus for automatically dispensing a measured volume of liquid. The liquid is fed into a cylinder and displaces a piston which expels quantity of liquid proportional to the piston stroke. At the end of the stroke, the piston is made to abut and close a switch which actuates an electric motor driving a four-way rotary valve to reverse the liquid flow direction in the cylinder, whereby the piston moves in the opposite direction to discharge a measured amount of the liquid which was previously used to push the piston. This patent was cited in the European Patent Office's search report on a corresponding application.

British Patent No. 1,270,262, issued on April 12, 1972 to Hamblin, presents an invention relating to metering units for bottle filling for simplifying such units from the point of view of cleaning and maintenance. The metering unit comprises a cylinder, separable end plates therefor, and a double-action piston freely mounted for movement along a central tube; a valve block adjacent to one end plate; a rotatable valve mounted in the valve block; and a discharge nozzle. This patent was cited in the European Patent Office's search report on a corresponding application.

Section 10. Identification of Person(s) Making This Information Disclosure Statement

The person making this statement is

(check each applicable item)

- (a) ☐ the inventor(s) who signs below

SIGNATURE OF INVENTOR

(type name of inventor who is signing)

- (b) ☐ an individual associated with the filing and prosecution of this application (37 C.F.R. § 1.56(c))

SIGNATURE OF INVENTOR

(type name of inventor who is signing)

- (c) ☒ the practitioner who signs below on the basis of the information:

(check each applicable item)

- ☐ supplied by the inventor(s).
☐ supplied by an individual associated with the filing and prosecution of this application. (37 C.F.R. § 1.56(c))
☒ in the practitioner's file.

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SIGNATURE OF PRACTITIONER

John S. Egbert

(type or print name of practitioner)

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